

APPENDIX 1
LISTED MINING COMPANIES DURING 2015-2017

No	Code	Listed Companies
1	CPIN	Charoen Pokphand Indonesia Tbk
2	SMGR	Semen Indonesia (Persero) Tbk
3	INTP	Indocement Tunggal Prakarsa Tbk
4	JPFA	JAPFA Comfeed Indonesia Tbk
5	FASW	Fajar Surya Wisesa Tbk
6	SMBR	Semen Baturaja (Persero) Tbk
7	WTON	Wijaya Karya Beton Tbk
8	IMPC	Impack Pratama Industri Tbk
9	TOTO	Surya Toto Indonesia Tbk
10	ARNA	Arwana Citramulia Tbk
11	MAIN	Malindo Feedmill Tbk
12	AMFG	Asahimas Flat Glass Tbk
13	MLIA	Mulia Industrindo Tbk
14	SIPD	Sierad Produce Tbk
15	BRNA	Berlina Tbk
16	GDST	Gunawan Dianjaya Steel Tbk
17	EKAD	Ekadharma International Tbk
18	SPMA	Suparma Tbk
19	KBRI	Kertas Basuki Rachmat Indonesia Tbk
20	AKPI	Argha Karya Prima Ind. Tbk
21	ALMI	Alumindo Light Metal Industry Tbk
22	IGAR	Champion Pacific Indonesia Tbk
23	INAI	Indal Aluminium Industry Tbk
24	ALKA	Alakasa Industrindo Tbk

No	Code	Listed Companies
25	BAJA	Saranacentral Bajatama Tbk
26	BTON	Betonjaya Manunggal Tbk
27	SIMA	Siwani Makmur Tbk
28	APLI	Asiaplast Industries Tbk
29	INCI	Intanwijaya Internasional Tbk
30	DPNS	Duta Pertiwi Nusantara Tbk
31	ETWA	Eterindo Wahanatama Tbk
32	TIRT	Tirta Mahakam Resources Tbk
33	LMSH	Lionmesh Prima Tbk
34	LION	Lion Metal Works Tbk
35	TRST	Trias Sentosa Tbk
36	YPAS	Yanaprima Hastapersada Tbk
37	KDSI	Kedawung Setia Industrial Tbk
38	HMSP	HM Sampoerna Tbk
39	UNVR	Unilever Indonesia Tbk
40	GGRM	Gudang Garam Tbk
41	ICBP	Indofood CBP Sukses Makmur Tbk
42	KLBF	Kalbe Farma Tbk
43	INDF	Indofood Sukses Makmur Tbk
44	MYOR	Mayora Indah Tbk
45	MLBI	Multi Bintang Indonesia Tbk
46	KAEF	Kimia Farma (Persero) Tbk
47	SIDO	Industri Jamu Farmasi Sido Muncul Tbk
48	ULTJ	Ultra Jaya Milk Industry Tbk
49	RMBA	Bentoel International Investama Tbk
50	TSPC	Tempo Scan Pacific Tbk

No	Code	Listed Companies
51	ROTI	Nippon Indosari Corpindo Tbk
52	BTEK	Bumi Teknokultura Unggul Tbk
53	DLTA	Delta Djakarta Tbk
54	KINO	Kino Indonesia Tbk
55	TCID	Mandom Indonesia Tbk
56	DVLA	Darya-Varia Laboratoria Tbk
57	SKBM	Sekar Bumi Tbk
58	ADES	Akasha Wira International Tbk
59	CEKA	Wilmar Cahaya Indonesia Tbk
60	WIIM	Wismilak Inti Makmur Tbk
61	LMPI	Langgeng Makmur Industri Tbk
62	KICI	Kedaung Indah Can Tbk
63	MRAT	Mustika Ratu Tbk
64	ALTO	Tri Banyan Tirta Tbk
65	MBTO	Martina Berto Tbk
66	ASII	Astra International Tbk
67	SMSM	Selamat Sempurna Tbk
68	IMAS	Indomobil Sukses Internasional Tbk
69	AUTO	Astra Otoparts Tbk
70	KBLI	KMI Wire and Cable Tbk
71	BATA	Sepatu Bata Tbk
72	MYTX	Asia Pacific Investama Tbk
73	NIPS	Nipress Tbk
74	STAR	Star Petrochem Tbk
75	KBLM	Kabelindo Murni Tbk
76	TRIS	Trisula International Tbk

No	Code	Listed Companies
77	RICY	Ricky Putra Globalindo Tbk
78	BIMA	Primarindo Asia Infrastructure Tbk
79	HDTX	Panasia Indo Resources Tbk



APPENDIX 2
CAPITAL STRUCTURE (DEBT TO EQUITY) YEAR 2015

No	Code	Total Debt (Rp)	Total Equity (Rp)	Debt/Equity
1	CPIN	12129993000000	12786663000000	95%
2	SMGR	10712320531000	27440798401000	39%
3	INTP	3772410000000	23865950000000	16%
4	JPFA	11049774000000	6109692000000	181%
5	FASW	4548288087745	2445346179224	186%
6	SMBR	319315349000	2949352584000	11%
7	WTON	2192672341480	2263425161325	97%
8	IMPC	578352730206	1096879954951	53%
9	TOTO	947997940099	1491542919106	64%
10	ARNA	536050998398	894728477056	60%
11	MAIN	2413482767000	1533953583000	157%
12	AMFG	880052000000	3390223000000	26%
13	MLIA	6010681233000	1115119044000	539%
14	SIPD	1512527888605	734242278294	206%
15	BRNA	992869623000	827914288000	120%
16	GDST	379524183280	804409999977	47%
17	EKAD	97730178889	291961416611	33%
18	SPMA	1390005205106	752677119911	185%
19	KBRI	934677601389	521253607073	179%
20	AKPI	1775577239000	1107565893000	160%
21	ALMI	1107565893000	565111000582	196%
22	IGAR	73471782127	310464258463	24%
23	INAI	1090438393880	239820902657	455%
24	ALKA	82596104000	62032301000	133%

No	Code	Total Debt (Rp)	Total Equity (Rp)	Debt/Equity
25	BAJA	787055068790	161627612352	487%
26	BTON	34011648533	149104596755	23%
27	SIMA	11338059067	28742499382	39%
28	APLI	87059306497	221561080751	39%
29	INCI	15494757317	154051308997	10%
30	DPNS	33187031327	241296079044	14%
31	ETWA	1256957157713	75774005423	1659%
32	TIRT	672006964821	91161062357	737%
33	LMSH	21341373897	112441377144	19%
34	LION	184730654202	454599496171	41%
35	TRST	1400438809900	1956920690054	72%
36	YPAS	128790247858	150399520729	86%
37	KDSI	798172379792	378921289074	211%
38	HMSP	5994664000000	32016060000000	19%
39	UNVR	10902585000000	4827360000000	226%
40	GGRM	25497504000000	38007909000000	67%
41	ICBP	10173713000000	16386911000000	62%
42	KLBF	2758131396170	10938285985269	25%
43	INDF	48709933000000	43121593000000	113%
44	MYOR	6148255759034	5077450725071	121%
45	MLBI	1334373000000	766480000000	174%
46	KAEF	1378319672511	2056559640523	67%
47	SIDO	197797000000	2598314000000	8%
48	ULTJ	742490216326	2797505693922	27%
49	RMBA	15816071000000	-3148757000000	-502%
50	TSPC	1947588124083	4337140975120	45%

No	Code	Total Debt (Rp)	Total Equity (Rp)	Debt/Equity
51	ROTI	1517788685162	1188534951872	128%
52	BTEK	2760410152490	437840594805	630%
53	DLTA	188700435000	849621481000	22%
54	KINO	1434605406270	1776629252300	81%
55	TCID	367225370670	1714871478033	21%
56	DVLA	402760903000	973517334000	41%
57	SKBM	420396809051	344087439659	122%
58	ADES	324855000000	328369000000	99%
59	CEKA	845932695663	639893514352	132%
60	WIIM	398991064485	943708980906	42%
61	LMPI	391881675091	401211837509	98%
62	KICI	40460281468	93371607348	43%
63	MRAT	120064018299	377026019809	32%
64	ALTO	673255888637	506972183527	133%
65	MBTO	214685781274	434213595966	49%
66	ASII	118902000000000	126533000000000	94%
67	SMSM	779860000000	1440248000000	54%
68	IMAS	18163865982392	6697091857105	271%
69	AUTO	4195684000000	10143426000000	41%
70	KBLI	524437909934	1027361931042	51%
71	BATA	248070766000	547187208000	45%
72	MYTX	2512252000000	-567926000000	-442%
73	NIPS	938717411000	609002679000	154%
74	STAR	239344544398	489676008886	49%
75	KBLM	357910337055	296475380006	121%
76	TRIS	239975493771	337810852786	71%

No	Code	Total Debt (Rp)	Total Equity (Rp)	Debt/Equity
77	RICY	798114824380	400079043512	199%
78	BIMA	301570909687	-202012514927	-149%
79	HDTX	3482406080000	1395961824000	249%



APPENDIX 2
CAPITAL STRUCTURE (DEBT TO EQUITY) YEAR 2016

No	Code	Total Debt (Rp)	Total Equity (Rp)	Debt/Equity
1	CPIN	10047751000000	14157243000000	71%
2	SMGR	13652504525000	30574391457000	45%
3	INTP	4011877000000	26138703000000	15%
4	JPFA	9878062000000	9372964000000	105%
5	FASW	5424781372865	3158442463132	172%
6	SMBR	1248119294000	3120757702000	40%
7	WTON	2171844871665	2490474913654	87%
8	IMPC	1050386739011	1225645183071	86%
9	TOTO	1057566418720	1523874519542	69%
10	ARNA	595128097887	948088201259	63%
11	MAIN	2082189069000	1744673771000	119%
12	AMFG	1905626000000	3599264000000	53%
13	MLIA	6110478983000	1613099694000	379%
14	SIPD	1424380421256	1142830772003	125%
15	BRNA	1060343634000	1028353275000	103%
16	GDST	425486909790	832122960120	51%
17	EKAD	110503822983	592004807725	19%
18	SPMA	1047296887831	1079146551310	97%
19	KBRI	844568778363	419158054955	201%
20	AKPI	1495874021000	1120035169000	134%
21	ALMI	1749336161470	403694342061	433%
22	IGAR	65716637766	373749035530	18%
23	INAI	1081015810782	258016602673	419%
24	ALKA	75514424000	61104431000	124%

No	Code	Total Debt (Rp)	Total Equity (Rp)	Debt/Equity
25	BAJA	786124255950	196502700474	400%
26	BTON	33757198849	143533430069	24%
27	SIMA	11920344067	28274553611	42%
28	APLI	67967245679	246501444451	28%
29	INCI	26524918593	242826462751	11%
30	DPNS	32865162199	263264403585	12%
31	ETWA	1151833904006	7101667028	16219%
32	TIRT	689189375810	126808101985	543%
33	LMSH	45511700128	117316469122	39%
34	LION	215209902816	470603093171	46%
35	TRST	1358241040272	1932355184014	70%
36	YPAS	138256225581	142001439411	97%
37	KDSI	722488734446	419784286104	172%
38	HMSP	8333263000000	34175014000000	24%
39	UNVR	12041437000000	4704258000000	256%
40	GGRM	23387406000000	39564228000000	59%
41	ICBP	10401125000000	18500823000000	56%
42	KLBF	2762162069572	12463847141085	22%
43	INDF	38233092000000	43941423000000	87%
44	MYOR	6657165872077	6121490034226	109%
45	MLBI	1454398000000	820640000000	177%
46	KAEF	2341155131870	2271407409194	103%
47	SIDO	229729000000	2757885000000	8%
48	ULTJ	749966146582	3489233494783	21%
49	RMBA	4029576000000	9441367000000	43%
50	TSPC	1950534206746	4635273142692	42%

No	Code	Total Debt (Rp)	Total Equity (Rp)	Debt/Equity
51	ROTI	1476889086692	1442751772026	102%
52	BTEK	3368860413064	1510854682236	223%
53	DLTA	185422642000	1012374008000	18%
54	KINO	1332431950729	1952072473629	68%
55	TCID	401942530776	1783158507325	23%
56	DVLA	451785946000	1079579612000	42%
57	SKBM	633267725358	368389286646	172%
58	ADES	383091000000	384388000000	100%
59	CEKA	538044038690	887920113728	61%
60	WIIM	362540740471	991093391804	37%
61	LMPI	402192705158	408172119564	99%
62	KICI	50799380910	89009754475	57%
63	MRAT	113947973889	369089199975	31%
64	ALTO	684252214422	480841418401	142%
65	MBTO	269032270377	440926897711	61%
66	ASII	121949000000000	139906000000000	87%
67	SMSM	674685000000	1580055000000	43%
68	IMAS	18923523905726	6709818352953	282%
69	AUTO	4075716000000	10536558000000	39%
70	KBLI	550076575595	1321345840449	42%
71	BATA	247587638000	557155279000	44%
72	MYTX	2544730000000	-924973000000	-275%
73	NIPS	935375496000	842580894000	111%
74	STAR	200161402637	490025951324	41%
75	KBLM	318436089653	320655277264	99%
76	TRIS	293073984034	346627180477	85%

No	Code	Total Debt (Rp)	Total Equity (Rp)	Debt/Equity
77	RICY	876184855001	412499070065	212%
78	BIMA	189216746183	-97175471622	-195%
79	HDTX	3565112660000	1178467098000	303%



APPENDIX 2
CAPITAL STRUCTURE (DEBT TO EQUITY) YEAR 2017

No	Code	Total Debt (Rp)	Total Equity (Rp)	Debt/Equity
1	CPIN	8819768000000	15702825000000	56%
2	SMGR	18524450664000	30439052302000	61%
3	INTP	4307169000000	24556507000000	18%
4	JPFA	11293242000000	9795628000000	115%
5	FASW	6081574204386	3288317572389	185%
6	SMBR	12429452000000	7196951000000	173%
7	WTON	4320040760957	2747935334086	157%
8	IMPC	1005656523820	1289020969663	78%
9	TOTO	1132699218954	1693791596547	67%
10	ARNA	571946769034	1029399792539	56%
11	MAIN	2371092779000	1701152698000	139%
12	AMFG	2718939000000	3548877000000	77%
13	MLIA	3432390525000	1754295083000	196%
14	SIPD	1448387000000	791312000000	183%
15	BRNA	1111847645000	853029437000	130%
16	GDST	441675308289	845279412176	52%
17	EKAD	133949920707	662817725465	20%
18	SPMA	980123282608	1172195335156	84%
19	KBRI	878173162999	293061447857	300%
20	AKPI	1618713342000	1126612491000	144%
21	ALMI	1997411244539	378870552389	527%
22	IGAR	71075842431	441946749143	16%
23	INAI	936511874370	277404670750	338%
24	ALKA	226717826000	78490877000	289%

No	Code	Total Debt (Rp)	Total Equity (Rp)	Debt/Equity
25	BAJA	774432726191	172016210273	450%
26	BTON	28862718117	154638932325	19%
27	SIMA	57800297489	28402292917	204%
28	APLI	171514782371	227183997248	75%
29	INCI	35408565186	268379825144	13%
30	DPNS	40655786593	267835387367	15%
31	ETWA	1235873364699	-121304792802	-1019%
32	TIRT	735476711731	123822344724	594%
33	LMSH	31541423763	129622003077	24%
34	LION	229630859719	452307088017	51%
35	TRST	1357336438524	1975569497486	69%
36	YPAS	176449823868	127093040665	139%
37	KDSI	842752226515	485539501101	174%
38	HMSP	9028078000000	34112985000000	26%
39	UNVR	13733025000000	5173388000000	265%
40	GGRM	24572266000000	42187664000000	58%
41	ICBP	11295184000000	20324330000000	56%
42	KLBF	2722207633646	13894031782689	20%
43	INDF	41182764000000	46756724000000	88%
44	MYOR	7561503434179	7354346366072	103%
45	MLBI	1445173000000	1064905000000	136%
46	KAEF	3523628217406	2572520755127	137%
47	SIDO	262333000000	2895865000000	9%
48	ULTJ	978185000000	4208755000000	23%
49	RMBA	5159928000000	8923670000000	58%
50	TSPC	2352891899876	5082008409145	46%

No	Code	Total Debt (Rp)	Total Equity (Rp)	Debt/Equity
51	ROTI	1739467993982	2820105715429	62%
52	BTEK	3318435703361	1987619409028	167%
53	DLTA	196197372000	1144645393000	17%
54	KINO	1182424339165	2055170880109	58%
55	TCID	503480853006	1858326336424	27%
56	DVLA	524586078000	1116300069000	47%
57	SKBM	599790014646	1023237460399	59%
58	ADES	417225000000	423011000000	99%
59	CEKA	489592257434	903044187067	54%
60	WIIM	247620731930	978091361111	25%
61	LMPI	458292046535	376256327751	122%
62	KICI	57921570888	91498438996	63%
63	MRAT	130623005085	366731414004	36%
64	ALTO	690099182411	419284788700	165%
65	MBTO	367927139244	412742622543	89%
66	ASII	1393170000000000	1563290000000000	89%
67	SMSM	615157000000	1828184000000	34%
68	IMAS	22149722400577	9290721214956	238%
69	AUTO	4003233000000	10759076000000	37%
70	KBLI	1083473884881	1507803738867	72%
71	BATA	276382503000	579308728000	48%
72	MYTX	3109652000000	349085000000	891%
73	NIPS	1018449877000	879512570000	116%
74	STAR	124422750504	490282287552	25%
75	KBLM	443770270269	791428577199	56%
76	TRIS	188736733204	356231586783	53%

No	Code	Total Debt (Rp)	Total Equity (Rp)	Debt/Equity
77	RICY	944179416586	430265371696	219%
78	BIMA	173964702574	-84637373721	-206%
79	HDTX	3701551196000	333535189000	1110%



APPENDIX 3
FIRM VALUE (TOBIN'S Q) YEAR 2015

No	Code	MVCS (Rp)	BVD (Rp)	Total Assets (Rp)	Tobin's Q
1	CPIN	60180660000000	71120000000	24916656000000	2,42
2	SMGR	63763840000000	173616621000	38153118932000	1,68
3	INTP	75557280621975	-9361444000000	27638360000000	2,40
4	JPFA	8299354572600	1445620000000	17159466000000	0,57
5	FASW	2948687656530	2829746630957	6993634266969	0,83
6	SMBR	3177570155500	-1619251620000	3268667933000	0,48
7	WTON	8541157268000	-262236576438	4456097502805	1,86
8	IMPC	461599250000	-319408332453	1675232685157	0,08
9	TOTO	634680000000	-400064665265	2439540859205	0,10
10	ARNA	4147908501440	525730912278	1430779475454	3,27
11	MAIN	2899181250000	385554846000	3947436350000	0,83
12	AMFG	2896950000000	-1351129000000	4270275000000	0,36
13	MLIA	681345000000	4480483446000	7125800277000	0,72
14	SIPD	577553203500	367364959547	2246770166899	0,42
15	BRNA	615860190000	408840222000	1820783911000	0,56
16	GDST	508400000000	-35237730659	1183934183257	0,40
17	EKAD	289991625000	-186325023850	389691595500	0,27
18	SPMA	165617179038	677309939016	2185464365772	0,39
19	KBRI	434399786700	619076832488	1455931208462	0,72
20	AKPI	625600000000	759756962000	2883143132000	0,48
21	ALMI	116424000000	253142772983	2189037586057	0,17
22	IGAR	228468057500	-236063174519	383936040590	-0,02
23	INAI	57340800000	124305822892	1330259296537	0,14
24	ALKA	81226408800	10813242000	144628405000	0,64

No	Code	MVCS (Rp)	BVD (Rp)	Total Assets (Rp)	Tobin's Q
25	BAJA	216000000000	119794540553	948682681142	0,35
26	BTON	198000000000	-102543362031	183116245288	-0,45
27	SIMA	72584738844	7716368218	40080558448	2,00
28	APLI	112500000000	5939679555	308620387248	0,38
29	INCI	49784777900	-91773865499	169546066314	-0,25
30	DPNS	104305934880	-151912434852	274483110371	-0,17
31	ETWA	76495463000	978117104790	1332731163136	0,79
32	TIRT	52612287000	151652031129	763168027178	0,27
33	LMSH	480000000000	-67784735147	133782751041	-0,15
34	LION	507156000000	-323614545642	639330150373	0,29
35	TRST	842400000000	262672091869	3357359499954	0,33
36	YPAS	534400071200	24568224466	279189768587	2,00
37	KDSI	92745000000	66913688735	1177093668866	0,14
38	HMSP	20732534026656	-23812666000000	38010724000000	-0,08
39	UNVR	327899250000000	4279471000000	15729945000000	21,12
40	GGRM	117369368000000	-17070927000000	63505413000000	1,58
41	ICBP	44606798100000	-3787787000000	26560624000000	1,54
42	KLBF	61172034353550	-5987334162532	13696417381439	4,03
43	INDF	62341028150000	5893188000000	91831526000000	0,74
44	MYOR	1092893242558	-1306091270053	11342715686221	-0,02
45	MLBI	15802500000000	624418000000	2100853000000	7,82
46	KAEF	60260900000000	-722602121108	3434879313034	1,54
47	SIDO	76500000000000	-1509642000000	2796111000000	2,20
48	ULTJ	2709302316000	-1361074838301	3539995910248	0,38
49	RMBA	3620002500000	8222052000000	12667314000000	0,93
50	TSPC	85725000000000	-2357334020269	6284729099203	0,99

No	Code	MVCS (Rp)	BVD (Rp)	Total Assets (Rp)	Tobin's Q
51	ROTI	6352559000000	704798039065	2706323637034	2,61
52	BTEK	151394691650	2280954636420	3198250747295	0,76
53	DLTA	4083361155000	-713306398000	1038321916000	3,25
54	KINO	5471428845000	-655291420313	3211234658570	1,50
55	TCID	3217066672000	-745447168746	2082096848703	1,19
56	DVLA	1338400000000	-641069131000	1376278237000	0,51
57	SKBM	510409337230	85476732940	764484248710	0,78
58	ADES	619391640000	48532000000	653224000000	1,02
59	CEKA	413525000000	-407086378682	1485826210015	0,00
60	WIIM	827350261440	-589822940910	1342700045391	0,18
61	LMPI	114971014266	-137394455231	793093512600	-0,03
62	KICI	17595000000	-32964485324	133831888816	-0,11
63	MRAT	93732000000	-260924150294	497090038108	-0,34
64	ALTO	717181185968	117496798053	1180228072164	0,71
65	MBTO	139100000000	-252618281458	648899377240	-0,17
66	ASII	260106828924500	13741000000000	245435000000000	1,12
67	SMSM	6824030396400	-588698000000	2220108000000	2,81
68	IMAS	5530556824000	5971591369072	24860957839497	0,46
69	AUTO	8193546100000	-601086000000	14339110000000	0,53
70	KBLI	81760000000	-437124763672	1551799840976	-0,23
71	BATA	1105000000000	-273140115000	795257974000	1,05
72	MYTX	74799995427	2018618000000	1944326000000	1,08
73	NIPS	817666666000	237434707000	1547720090000	0,68
74	STAR	268800033712	-173352396073	729020553284	0,13
75	KBLM	145600000000	-4367408571	654385717061	0,22
76	TRIS	291679524675	-190446204098	577786346557	0,18

No	Code	MVCS (Rp)	BVD (Rp)	Total Assets (Rp)	Tobin's Q
77	RICY	88557016380	-53362748224	1198193867892	0,03
78	BIMA	15265000000	218169058804	99558394759	2,34
79	HDTX	2827148298000	2855592768000	4878367904000	1,16



APPENDIX 3
FIRM VALUE (TOBIN'S Q) YEAR 2016

No	Code	MVCS (Rp)	BVD (Rp)	Total Assets (Rp)	Tobin's Q
1	CPIN	54113400000000	-2011682000000	24204994000000	2,15
2	SMGR	55014848000000	3279345698000	44226895982000	1,32
3	INTP	57059091334500	-10412745000000	30150580000000	1,55
4	JPFA	20046748779200	-11829460000000	19251026000000	0,98
5	FASW	11299172868720	3257745819266	8583223835997	1,70
6	SMBR	21249385560000	4098872600000	4368876996000	4,96
7	WTON	7059527946000	-268092048067	4662319785318	1,46
8	IMPC	50268400000000	-211565317083	2276031922082	2,12
9	TOTO	48297600000000	-232642014666	2581440938262	1,78
10	ARNA	2921889528448	-47763948026	1543216299146	1,86
11	MAIN	2798437500000	321117272000	3826862840000	0,82
12	AMFG	30380000000000	1179030000000	55048900000000	0,57
13	MLIA	7408800000000	4520534253000	7723578677000	0,68
14	SIPD	1037804498725	-73776343091	2567211193259	0,38
15	BRNA	1077021000000	283027179000	2088696909000	0,65
16	GDST	8282000000000	-42150748457	1257609869910	0,63
17	EKAD	492636375000	-227140260653	702508630708	0,38
18	SPMA	401768482020	347983427417	2158852415950	0,35
19	KBRI	434399786700	684296545570	1263726833318	0,89
20	AKPI	6256000000000	625727880000	2615909190000	0,48
21	ALMI	1139600000000	324624754289	2153030503531	0,20
22	IGAR	495824295000	-297287676438	439465673296	0,45
23	INAI	1180080000000	106733360441	1339032413455	0,17
24	ALKA	71580772755	17190494000	136618855000	0,65

No	Code	MVCS (Rp)	BVD (Rp)	Total Assets (Rp)	Tobin's Q
25	BAJA	518400000000	36293931810	982626956424	0,56
26	BTON	92160000000	-95044277237	177290628918	-0,02
27	SIMA	72584738844	7417517357	40194897678	1,99
28	APLI	156000000000	-3164333321	314468690130	0,49
29	INCI	53809198310	-92218448969	269351381344	-0,14
30	DPNS	133776500608	-142042215255	296129565784	-0,03
31	ETWA	76495463000	1069061104670	1158935571034	0,99
32	TIRT	224613994500	130587285074	815997477795	0,44
33	LMSH	50880000000	-52763008918	162828169250	-0,01
34	LION	507156000000	-327603951193	685812995987	0,26
35	TRST	842400000000	178241148504	3290596224286	0,31
36	YPAS	534400071200	20147617764	280257664992	1,98
37	KDSI	137700000000	12904850747	1142273020550	0,13
38	HMSP	459456403755000	-25314233000000	42508277000000	10,21
39	UNVR	335720000000000	5453328000000	16745695000000	20,37
40	GGRM	125883457400000	-18545767000000	62951634000000	1,71
41	ICBP	101750147300000	-5170237000000	28901948000000	3,34
42	KLBF	70781434386100	-6810367698325	15226009210657	4,20
43	INDF	71779986637500	9247649000000	82174515000000	0,99
44	MYOR	45835334436250	-2082616878064	12922421859142	3,39
45	MLBI	24230500000000	553140000000	2275038000000	10,89
46	KAEF	10219360000000	-565582326418	4612562541064	2,09
47	SIDO	8250000000000	-1564396000000	2987614000000	2,24
48	ULTJ	3032801100000	-2124855727431	4239199641365	0,21
49	RMBA	16380511312500	-4678847000000	13470943000000	0,87
50	TSPC	8370000000000	-2434549709545	6585807349438	0,90

No	Code	MVCS (Rp)	BVD (Rp)	Total Assets (Rp)	Tobin's Q
51	ROTI	7744554000000	527474748635	2919640858718	2,83
52	BTEK	759240174919	2708678382678	4879715095300	0,71
53	DLTA	3522899820000	-862711055000	1197796650000	2,22
54	KINO	3785714475000	-543725598398	3284504424358	0,99
55	TCID	3016000005000	-772539873711	2185101038101	1,03
56	DVLA	1904000000000	-617181148000	1531365558000	0,84
57	SKBM	468265447000	113997968459	1001657012004	0,58
58	ADES	631189576000	63477000000	767479000000	0,91
59	CEKA	1127525000000	-565821213380	1425964152418	0,39
60	WIIM	999539909760	-634384331169	1353634132275	0,27
61	LMPI	148252097343	-146381032031	810364824722	0,00
62	KICI	30360000000	-28617359596	139809135385	0,01
63	MRAT	91592000000	-258783527588	483037173864	-0,35
64	ALTO	708459401160	434431271222	1165093632823	0,98
65	MBTO	190460000000	-203729743656	709959168088	-0,02
66	ASII	324880513948500	11546000000000	261855000000000	1,28
67	SMSM	6104195966400	-779702000000	2254740000000	2,36
68	IMAS	3442771622940	7283826080976	25633342258679	0,42
69	AUTO	10507017940000	-828186000000	14612274000000	0,66
70	KBLI	296800000000	-673376609222	1871422416044	-0,20
71	BATA	1046500000000	-286312495000	804742917000	0,94
72	MYTX	103957326978	2184421000000	1619757000000	1,41
73	NIPS	732629332736	110002720000	1777956390000	0,47
74	STAR	336000042140	-186073733866	690187353961	0,22
75	KBLM	551040000000	-76302064335	639091366917	0,74
76	TRIS	330387961900	-169504120724	639701164511	0,25

No	Code	MVCS (Rp)	BVD (Rp)	Total Assets (Rp)	Tobin's Q
77	RICY	97541061520	-67751968538	1288683925066	0,02
78	BIMA	63858450180	109916590017	92041274561	1,89
79	HDTX	1800731400000	2983069168000	4743579758000	1,01



APPENDIX 3
FIRM VALUE (TOBIN'S Q) YEAR 2017

No	Code	MVCS (Rp)	BVD (Rp)	Total Assets (Rp)	Tobin's Q
1	CPIN	52473600000000	-2900962000000	24522593000000	2,02
2	SMGR	54866559990750	4722632131000	48963502966000	1,22
3	INTP	73624633980000	-8575905000000	28863676000000	2,25
4	JPFA	18445575911400	1039170000000	210888700000000	0,88
5	FASW	13566441108825	3297567363133	9369891776775	1,80
6	SMBR	239848770000000	9502441000000	196264030000000	1,71
7	WTON	5098547961000	-31336413442	7067976095043	0,72
8	IMPC	48093325000000	-195012073618	2294677493483	2,01
9	TOTO	39628800000000	-183932415054	2826490815501	1,34
10	ARNA	2540135117696	-168243755212	1601346561573	1,48
11	MAIN	16119000000000	676050005000	4072245477000	0,56
12	AMFG	23544500000000	7156180000000	62678160000000	0,49
13	MLIA	8004150000000	2171375775000	5186685608000	0,57
14	SIPD	1365884630580	2797170000000	22396990000000	0,73
15	BRNA	11651409000000	393090115000	1964877082000	0,79
16	GDST	7052000000000	-10343936151	1286954720465	0,54
17	EKAD	485648625000	-279667166749	796767646172	0,26
18	SPMA	647058713148	229886198259	2175660855114	0,40
19	KBRI	434399786700	770906770465	1171234610856	1,03
20	AKPI	5134000000000	615682914000	2745325833000	0,41
21	ALMI	1367520000000	296129768439	2376281796928	0,18
22	IGAR	384992982000	-325177050322	513022591574	0,12
23	INAI	2711808000000	75762614795	1213916545120	0,29
24	ALKA	236571915630	-50439568000	305208703000	0,61

No	Code	MVCS (Rp)	BVD (Rp)	Total Assets (Rp)	Tobin's Q
25	BAJA	298800000000	47192625236	946448936464	0,37
26	BTON	102240000000	-109298681852	183501650442	-0,04
27	SIMA	57979273101	53253113022	86202590406	1,29
28	APLI	155344539600	45109829764	398698779619	0,50
29	INCI	108621333600	-110132073595	303788390330	0,00
30	DPNS	119869042624	-140542987614	308491173960	-0,07
31	ETWA	61002711000	1195606410427	1114568571897	1,13
32	TIRT	95106826500	145562819058	859299056455	0,28
33	LMSH	720000000000	-58028599762	161163426840	0,09
34	LION	340704800000	-273525473954	681937947736	0,10
35	TRST	1083888000000	167609413618	3332905936010	0,38
36	YPAS	597860079655	27591888531	303542864533	2,06
37	KDSI	234900000000	1571648482	1328291727616	0,18
38	HMSP	547858142199000	-25152275000000	43141063000000	12,12
39	UNVR	411829250000000	5791390000000	18906413000000	22,09
40	GGRM	135263386400000	-19192224000000	66759930000000	1,74
41	ICBP	102041695000000	-5284147000000	31619514000000	3,06
42	KLBF	67031424617300	-7321742866932	16616239416335	3,59
43	INDF	62780049475000	8667365000000	87939488000000	0,81
44	MYOR	58356206282250	-3112696137134	14915849800251	3,70
45	MLBI	31605000000000	368328000000	2510078000000	12,74
46	KAEF	13496220000000	-138461998578	6096148972533	2,19
47	SIDO	10350000000000	-1366568000000	3158198000000	2,84
48	ULTJ	4144828170000	-2461805000000	5186940000000	0,32
49	RMBA	12012374962500	-3845133000000	14083598000000	0,58
50	TSPC	72900000000000	-2696471964511	7434900309021	0,62

No	Code	MVCS (Rp)	BVD (Rp)	Total Assets (Rp)	Tobin's Q
51	ROTI	7392854221160	-580469445037	4559573709411	1,49
52	BTEK	861918370003	2213251576571	5306055112389	0,58
53	DLTA	4103377631250	-1010378817000	1340842765000	2,31
54	KINO	2871428715000	-612980640689	3237595219274	0,70
55	TCID	3498560005800	-772997738536	2361807189430	1,15
56	DVLA	2240000000000	-651069523000	1640886147000	0,97
57	SKBM	863001608500	-236849582586	1623027475045	0,39
58	ADES	542705056000	122981000000	840236000000	0,79
59	CEKA	856800000000	-498887700115	1392636444501	0,26
60	WIIM	554366672640	-613551574303	1225712093041	-0,05
61	LMPI	182541698089	-113948171827	834548374286	0,08
62	KICI	496800000000	-32424071702	149420009884	0,12
63	MRAT	856000000000	-253639901453	497354419089	-0,34
64	ALTO	846062035388	497155241772	1109383971111	1,21
65	MBTO	140170000000	-152456944098	780669761787	-0,02
66	ASII	331965135748000	18024000000000	295646000000000	1,18
67	SMSM	7342311186000	-954953000000	2443341000000	2,61
68	IMAS	3415118838820	8886830385571	31440443615533	0,39
69	AUTO	9205690030000	-1225308000000	14762309000000	0,54
70	KBLI	2576000000000	-616086025106	2591277623748	-0,14
71	BATA	7735000000000	-291571912000	855691231000	0,56
72	MYTX	223519986335	2345224000000	3458737000000	0,74
73	NIPS	631238666152	92635629000	1897962447000	0,38
74	STAR	441600055384	-196861622480	614705038056	0,40
75	KBLM	353920000000	-105069831861	1235198847468	0,20
76	TRIS	307990813788	-168109760221	544968319987	0,26

No	Code	MVCS (Rp)	BVD (Rp)	Total Assets (Rp)	Tobin's Q
77	RICY	94332473970	-93641577694	1374444788282	0,00
78	BIMA	45005002984	101579545177	89327328853	1,64
79	HDTX	1224497352000	3453721568000	4035086385000	1,16



APPENDIX 4
PROFITABILITY (ROE) YEAR 2015

No	Code	Net Income (Rp)	Total Equity (Rp)	ROE
1	CPIN	1832598000000	12786663000000	14%
2	SMGR	4525441038000	27440798401000	16%
3	INTP	4356661000000	23865950000000	18%
4	JPFA	5244840000000	61096920000000	9%
5	FASW	-308896601295	2445346179224	-13%
6	SMBR	354180062000	2949352584000	12%
7	WTON	171784021770	2263425161325	8%
8	IMPC	129759075975	1096879954951	12%
9	TOTO	285236780659	1491542919106	19%
10	ARNA	71209943348	894728477056	8%
11	MAIN	-62097227000	1533953583000	-4%
12	AMFG	3413460000000	3390223000000	10%
13	MLIA	-155911654000	1115119044000	-14%
14	SIPD	-362030918107	734242278294	-49%
15	BRNA	-7159572000	827914288000	-1%
16	GDST	-55212703852	804409999977	-7%
17	EKAD	47040256456	291961416611	16%
18	SPMA	-42597342144	752677119911	-6%
19	KBRI	-155746630931	521253607073	-30%
20	AKPI	27644714000	1107565893000	2%
21	ALMI	-53613905767	565111000582	-9%
22	IGAR	51416184307	310464258463	17%
23	INAI	28615673167	239820902657	12%
24	ALKA	-1175538000	62032301000	-2%

No	Code	Net Income (Rp)	Total Equity (Rp)	ROE
25	BAJA	-9349900882	161627612352	-6%
26	BTON	6323778025	149104596755	4%
27	SIMA	-1483892133	28742499382	-5%
28	APLI	1854274736	221561080751	1%
29	INCI	16960660023	154051308997	11%
30	DPNS	9859176172	241296079044	4%
31	ETWA	-224231055302	75774005423	-296%
32	TIRT	-865431603	91161062357	-1%
33	LMSH	1944443395	112441377144	2%
34	LION	46018637487	454599496171	10%
35	TRST	25314103403	1956920690054	1%
36	YPAS	-9880781293	150399520729	-7%
37	KDSI	11470563293	378921289074	3%
38	HMSP	10363308000000	32016060000000	32%
39	UNVR	5851805000000	4827360000000	121%
40	GGRM	6452834000000	38007909000000	17%
41	ICBP	2923148000000	16386911000000	18%
42	KLBF	2057694281873	10938285985269	19%
43	INDF	3709501000000	43121593000000	9%
44	MYOR	1250233128560	5077450725071	25%
45	MLBI	496909000000	766480000000	65%
46	KAEF	265549762083	2056559640523	13%
47	SIDO	437475000000	2598314000000	17%
48	ULTJ	523100215029	2797505693922	19%
49	RMBA	-1638538000000	-3148757000000	52%
50	TSPC	529218651807	4337140975120	12%

No	Code	Net Income (Rp)	Total Equity (Rp)	ROE
51	ROTI	270538700440	1188534951872	23%
52	BTEK	2830064400	437840594805	1%
53	DLTA	192045199000	849621481000	23%
54	KINO	262980202426	1776629252300	15%
55	TCID	544474278014	1714871478033	32%
56	DVLA	107894430000	973517334000	11%
57	SKBM	40150568620	344087439659	12%
58	ADES	32839000000	328369000000	10%
59	CEKA	106549446980	639893514352	17%
60	WIIM	131081111587	943708980906	14%
61	LMPI	3968046308	401211837509	1%
62	KICI	-13000883220	93371607348	-14%
63	MRAT	1045990311	377026019809	0%
64	ALTO	-24345726797	506972183527	-5%
65	MBTO	-14056549894	434213595966	-3%
66	ASII	15613000000000	126533000000000	12%
67	SMSM	461307000000	1440248000000	32%
68	IMAS	-22489430531	6697091857105	0%
69	AUTO	322701000000	10143426000000	3%
70	KBLI	115371098970	1027361931042	11%
71	BATA	129519446000	547187208000	24%
72	MYTX	-263871000000	-567926000000	46%
73	NIPS	30671338000	609002679000	5%
74	STAR	306885570	489676008886	0%
75	KBLM	12760365612	296475380006	4%
76	TRIS	41819203326	337810852786	12%

No	Code	Net Income (Rp)	Total Equity (Rp)	ROE
77	RICY	13465713464	400079043512	3%
78	BIMA	-771373985	-202012514927	0%
79	HDTX	-355659019000	1395961824000	-25%



APPENDIX 4
PROFITABILITY (ROE) YEAR 2016

No	Code	Net Income (Rp)	Total Equity (Rp)	ROE
1	CPIN	2225402000000	14157243000000	16%
2	SMGR	4535036823000	30574391457000	15%
3	INTP	3870319000000	26138703000000	15%
4	JPFA	2171608000000	9372964000000	23%
5	FASW	778012761625	3158442463132	25%
6	SMBR	259090525000	3120757702000	8%
7	WTON	281567627374	2490474913654	11%
8	IMPC	125823130775	1225645183071	10%
9	TOTO	168564583718	1523874519542	11%
10	ARNA	91375910975	948088201259	10%
11	MAIN	290230477000	1744673771000	17%
12	AMFG	260444000000	3599264000000	7%
13	MLIA	9039563000	1613099694000	1%
14	SIPD	13048780927	1142830772003	1%
15	BRNA	12664977000	1028353275000	1%
16	GDST	31704557018	832122960120	4%
17	EKAD	90685821530	592004807725	15%
18	SPMA	81063430679	1079146551310	8%
19	KBRI	-102760678879	419158054955	-25%
20	AKPI	52393857000	1120035169000	5%
21	ALMI	-99931854409	403694342061	-25%
22	IGAR	69305629795	373749035530	19%
23	INAI	35552975244	258016602673	14%
24	ALKA	516167000	61104431000	1%

No	Code	Net Income (Rp)	Total Equity (Rp)	ROE
25	BAJA	34393355090	196502700474	18%
26	BTON	-5974737984	143533430069	-4%
27	SIMA	-701340771	28274553611	-2%
28	APLI	25109482194	246501444451	10%
29	INCI	9988836259	242826462751	4%
30	DPNS	10009391103	263264403585	4%
31	ETWA	-68488774415	7101667028	-964%
32	TIRT	28988504757	126808101985	23%
33	LMSH	6252814811	117316469122	5%
34	LION	42345417055	470603093171	9%
35	TRST	33794866940	1932355184014	2%
36	YPAS	-10932426503	142001439411	-8%
37	KDSI	47127349067	419784286104	11%
38	HMSP	12762229000000	34175014000000	37%
39	UNVR	6390672000000	4704258000000	136%
40	GGRM	6672682000000	39564228000000	17%
41	ICBP	3631301000000	18500823000000	20%
42	KLBF	2350884933551	12463847141085	19%
43	INDF	5266906000000	43941423000000	12%
44	MYOR	1388676127665	6121490034226	23%
45	MLBI	982129000000	820640000000	120%
46	KAEF	271597947663	2271407409194	12%
47	SIDO	480525000000	2757885000000	17%
48	ULTJ	709825635742	3489233494783	20%
49	RMBA	-2085811000000	9441367000000	-22%
50	TSPC	545493536262	4635273142692	12%

No	Code	Net Income (Rp)	Total Equity (Rp)	ROE
51	ROTI	279777368831	1442751772026	19%
52	BTEK	2246189813	1510854682236	0%
53	DLTA	254509268000	1012374008000	25%
54	KINO	181110153810	1952072473629	9%
55	TCID	162059596347	1783158507325	9%
56	DVLA	152083400000	1079579612000	14%
57	SKBM	22545456050	368389286646	6%
58	ADES	55951000000	384388000000	15%
59	CEKA	249697013626	887920113728	28%
60	WIIM	106290306868	991093391804	11%
61	LMPI	6933035457	408172119564	2%
62	KICI	362936663	89009754475	0%
63	MRAT	-5549465678	369089199975	-2%
64	ALTO	-26500565763	480841418401	-6%
65	MBTO	8813611079	440926897711	2%
66	ASII	18302000000000	139906000000000	13%
67	SMSM	502192000000	1580055000000	32%
68	IMAS	-312881005784	6709818352953	-5%
69	AUTO	483421000000	10536558000000	5%
70	KBLI	334338838592	1321345840449	25%
71	BATA	42231663000	557155279000	8%
72	MYTX	-356491000000	-924973000000	39%
73	NIPS	65683137000	842580894000	8%
74	STAR	462555306	490025951324	0%
75	KBLM	21245022916	320655277264	7%
76	TRIS	24191377409	346627180477	7%

No	Code	Net Income (Rp)	Total Equity (Rp)	ROE
77	RICY	14033426519	412499070065	3%
78	BIMA	17410120742	-97175471622	-18%
79	HDTX	-393567637000	1178467098000	-33%



APPENDIX 4
PROFITABILITY (ROE) YEAR 2017

No	Code	Net Income (Rp)	Total Equity (Rp)	ROE
1	CPIN	2496787000000	15702825000000	16%
2	SMGR	2043025914000	30439052302000	7%
3	INTP	1859818000000	24556507000000	8%
4	JPFA	1107810000000	9795628000000	11%
5	FASW	595868198714	3288317572389	18%
6	SMBR	-758045000000	7196951000000	-11%
7	WTON	340458859392	2747935334086	12%
8	IMPC	91303491940	1289020969663	7%
9	TOTO	278935804544	1693791596547	16%
10	ARNA	122183909643	1029399792539	12%
11	MAIN	48698329000	1701152698000	3%
12	AMFG	38569000000	3548877000000	1%
13	MLIA	47534072000	1754295083000	3%
14	SIPD	-354925000000	791312000000	-45%
15	BRNA	-178283422000	853029437000	-21%
16	GDST	10284697314	845279412176	1%
17	EKAD	76195665729	662817725465	11%
18	SPMA	92280117234	1172195335156	8%
19	KBRI	-125704262232	293061447857	-43%
20	AKPI	13333970000	1126612491000	1%
21	ALMI	8446455684	378870552389	2%
22	IGAR	72376683136	441946749143	16%
23	INAI	38651704520	277404670750	14%
24	ALKA	15406256000	78490877000	20%

No	Code	Net Income (Rp)	Total Equity (Rp)	ROE
25	BAJA	-22984761751	172016210273	-13%
26	BTON	11370927212	154638932325	7%
27	SIMA	161969306	28402292917	1%
28	APLI	-1329429201	227183997248	-1%
29	INCI	16554272131	268379825144	6%
30	DPNS	5963420071	267835387367	2%
31	ETWA	-127520042125	-121304792802	105%
32	TIRT	1001385942	123822344724	1%
33	LMSH	12967113850	129622003077	10%
34	LION	9282943009	452307088017	2%
35	TRST	38199681742	1975569497486	2%
36	YPAS	-14500028420	127093040665	-11%
37	KDSI	68965208549	485539501101	14%
38	HMSP	12670534000000	34112985000000	37%
39	UNVR	7004562000000	5173388000000	135%
40	GGRM	7755347000000	42187664000000	18%
41	ICBP	3543173000000	20324330000000	17%
42	KLBF	2453251410604	13894031782689	18%
43	INDF	5145063000000	46756724000000	11%
44	MYOR	1630953830893	7354346366072	22%
45	MLBI	1322067000000	1064905000000	124%
46	KAEF	331707917461	2572520755127	13%
47	SIDO	533799000000	2895865000000	18%
48	ULTJ	711681000000	4208755000000	17%
49	RMBA	-480063000000	8923670000000	-5%
50	TSPC	557339581996	5082008409145	11%

No	Code	Net Income (Rp)	Total Equity (Rp)	ROE
51	ROTI	135364021139	2820105715429	5%
52	BTEK	-42843793031	1987619409028	-2%
53	DLTA	279772635000	1144645393000	24%
54	KINO	109696001798	2055170880109	5%
55	TCID	179126382068	1858326336424	10%
56	DVLA	162249293000	1116300069000	15%
57	SKBM	25880464791	1023237460399	3%
58	ADES	38242000000	423011000000	9%
59	CEKA	107420886839	903044187067	12%
60	WIIM	40589790851	978091361111	4%
61	LMPI	-31140558174	376256327751	-8%
62	KICI	7946916114	91498438996	9%
63	MRAT	-1283332109	366731414004	0%
64	ALTO	-62849581665	419284788700	-15%
65	MBTO	-24690826118	412742622543	-6%
66	ASII	23165000000000	156329000000000	15%
67	SMSM	555388000000	1828184000000	30%
68	IMAS	-64296811100	9290721214956	-1%
69	AUTO	547781000000	10759076000000	5%
70	KBLI	358974051474	1507803738867	24%
71	BATA	53654376000	579308728000	9%
72	MYTX	-286485000000	349085000000	-82%
73	NIPS	44110825000	879512570000	5%
74	STAR	594726798	490282287552	0%
75	KBLM	43994949645	791428577199	6%
76	TRIS	14198889550	356231586783	4%

No	Code	Net Income (Rp)	Total Equity (Rp)	ROE
77	RICY	16558562698	430265371696	4%
78	BIMA	15795652032	-84637373721	-19%
79	HDTX	-847049209000	333535189000	-254%



APPENDIX 4
FIRM SIZE (Ln TOTAL ASSETS) YEAR 2015

No	Code	Total Assets (Rp)	Ln Total Assets
1	CPIN	24916656000000	31
2	SMGR	38153118932000	31
3	INTP	27638360000000	31
4	JPFA	17159466000000	30
5	FASW	6993634266969	30
6	SMBR	3268667933000	29
7	WTON	4456097502805	29
8	IMPC	1675232685157	28
9	TOTO	2439540859205	29
10	ARNA	1430779475454	28
11	MAIN	3947436350000	29
12	AMFG	4270275000000	29
13	MLIA	7125800277000	30
14	SIPD	2246770166899	28
15	BRNA	1820783911000	28
16	GDST	1183934183257	28
17	EKAD	389691595500	27
18	SPMA	2185464365772	28
19	KBRI	1455931208462	28
20	AKPI	2883143132000	29
21	ALMI	2189037586057	28
22	IGAR	383936040590	27
23	INAI	1330259296537	28
24	ALKA	144628405000	26

No	Code	Total Assets (Rp)	Ln Total Assets
25	BAJA	948682681142	28
26	BTON	183116245288	26
27	SIMA	40080558448	24
28	APLI	308620387248	26
29	INCI	169546066314	26
30	DPNS	274483110371	26
31	ETWA	1332731163136	28
32	TIRT	763168027178	27
33	LMSH	133782751041	26
34	LION	639330150373	27
35	TRST	3357359499954	29
36	YPAS	279189768587	26
37	KDSI	1177093668866	28
38	HMSP	38010724000000	31
39	UNVR	15729945000000	30
40	GGRM	63505413000000	32
41	ICBP	26560624000000	31
42	KLBF	13696417381439	30
43	INDF	91831526000000	32
44	MYOR	11342715686221	30
45	MLBI	21008530000000	28
46	KAEF	3434879313034	29
47	SIDO	27961110000000	29
48	ULTJ	3539995910248	29
49	RMBA	12667314000000	30
50	TSPC	6284729099203	29

No	Code	Total Assets (Rp)	Ln Total Assets
51	ROTI	2706323637034	29
52	BTEK	3198250747295	29
53	DLTA	1038321916000	28
54	KINO	3211234658570	29
55	TCID	2082096848703	28
56	DVLA	1376278237000	28
57	SKBM	764484248710	27
58	ADES	653224000000	27
59	CEKA	1485826210015	28
60	WIIM	1342700045391	28
61	LMPI	793093512600	27
62	KICI	133831888816	26
63	MRAT	497090038108	27
64	ALTO	1180228072164	28
65	MBTO	648899377240	27
66	ASII	245435000000000	33
67	SMSM	2220108000000	28
68	IMAS	24860957839497	31
69	AUTO	14339110000000	30
70	KBLI	1551799840976	28
71	BATA	795257974000	27
72	MYTX	1944326000000	28
73	NIPS	1547720090000	28
74	STAR	729020553284	27
75	KBLM	654385717061	27
76	TRIS	577786346557	27

No	Code	Total Assets (Rp)	Ln Total Assets
77	RICY	1198193867892	28
78	BIMA	99558394759	25
79	HDTX	4878367904000	29



APPENDIX 4
FIRM SIZE (Ln TOTAL ASSETS) YEAR 2016

No	Code	Total Assets (Rp)	Ln Total Assets
1	CPIN	24204994000000	31
2	SMGR	44226895982000	31
3	INTP	30150580000000	31
4	JPFA	19251026000000	31
5	FASW	8583223835997	30
6	SMBR	4368876996000	29
7	WTON	4662319785318	29
8	IMPC	2276031922082	28
9	TOTO	2581440938262	29
10	ARNA	1543216299146	28
11	MAIN	3826862840000	29
12	AMFG	5504890000000	29
13	MLIA	7723578677000	30
14	SIPD	2567211193259	29
15	BRNA	2088696909000	28
16	GDST	1257609869910	28
17	EKAD	702508630708	27
18	SPMA	2158852415950	28
19	KBRI	1263726833318	28
20	AKPI	2615909190000	29
21	ALMI	2153030503531	28
22	IGAR	439465673296	27
23	INAI	1339032413455	28
24	ALKA	136618855000	26

No	Code	Total Assets (Rp)	Ln Total Assets
25	BAJA	982626956424	28
26	BTON	177290628918	26
27	SIMA	40194897678	24
28	APLI	314468690130	26
29	INCI	269351381344	26
30	DPNS	296129565784	26
31	ETWA	1158935571034	28
32	TIRT	815997477795	27
33	LMSH	162828169250	26
34	LION	685812995987	27
35	TRST	3290596224286	29
36	YPAS	280257664992	26
37	KDSI	1142273020550	28
38	HMSP	42508277000000	31
39	UNVR	16745695000000	30
40	GGRM	62951634000000	32
41	ICBP	28901948000000	31
42	KLBF	15226009210657	30
43	INDF	82174515000000	32
44	MYOR	12922421859142	30
45	MLBI	22750380000000	28
46	KAEF	4612562541064	29
47	SIDO	29876140000000	29
48	ULTJ	4239199641365	29
49	RMBA	13470943000000	30
50	TSPC	6585807349438	30

No	Code	Total Assets (Rp)	Ln Total Assets
51	ROTI	2919640858718	29
52	BTEK	4879715095300	29
53	DLTA	1197796650000	28
54	KINO	3284504424358	29
55	TCID	2185101038101	28
56	DVLA	1531365558000	28
57	SKBM	1001657012004	28
58	ADES	7674790000000	27
59	CEKA	1425964152418	28
60	WIIM	1353634132275	28
61	LMPI	810364824722	27
62	KICI	139809135385	26
63	MRAT	483037173864	27
64	ALTO	1165093632823	28
65	MBTO	709959168088	27
66	ASII	261855000000000	33
67	SMSM	2254740000000	28
68	IMAS	25633342258679	31
69	AUTO	14612274000000	30
70	KBLI	1871422416044	28
71	BATA	804742917000	27
72	MYTX	1619757000000	28
73	NIPS	1777956390000	28
74	STAR	690187353961	27
75	KBLM	639091366917	27
76	TRIS	639701164511	27

No	Code	Total Assets (Rp)	Ln Total Assets
77	RICY	1288683925066	28
78	BIMA	92041274561	25
79	HDTX	4743579758000	29



APPENDIX 4
FIRM SIZE (Ln TOTAL ASSETS) YEAR 2017

No	Code	Total Assets (Rp)	Ln Total Assets
1	CPIN	24522593000000	31
2	SMGR	48963502966000	32
3	INTP	28863676000000	31
4	JPFA	21088870000000	31
5	FASW	9369891776775	30
6	SMBR	19626403000000	31
7	WTON	7067976095043	30
8	IMPC	2294677493483	28
9	TOTO	2826490815501	29
10	ARNA	1601346561573	28
11	MAIN	4072245477000	29
12	AMFG	6267816000000	29
13	MLIA	5186685608000	29
14	SIPD	2239699000000	28
15	BRNA	1964877082000	28
16	GDST	1286954720465	28
17	EKAD	796767646172	27
18	SPMA	2175660855114	28
19	KBRI	1171234610856	28
20	AKPI	2745325833000	29
21	ALMI	2376281796928	28
22	IGAR	513022591574	27
23	INAI	1213916545120	28
24	ALKA	305208703000	26

No	Code	Total Assets (Rp)	Ln Total Assets
25	BAJA	946448936464	28
26	BTON	183501650442	26
27	SIMA	86202590406	25
28	APLI	398698779619	27
29	INCI	303788390330	26
30	DPNS	308491173960	26
31	ETWA	1114568571897	28
32	TIRT	859299056455	27
33	LMSH	161163426840	26
34	LION	681937947736	27
35	TRST	3332905936010	29
36	YPAS	303542864533	26
37	KDSI	1328291727616	28
38	HMSP	43141063000000	31
39	UNVR	18906413000000	31
40	GGRM	66759930000000	32
41	ICBP	31619514000000	31
42	KLBF	16616239416335	30
43	INDF	87939488000000	32
44	MYOR	14915849800251	30
45	MLBI	25100780000000	29
46	KAEF	6096148972533	29
47	SIDO	31581980000000	29
48	ULTJ	51869400000000	29
49	RMBA	140835980000000	30
50	TSPC	7434900309021	30

No	Code	Total Assets (Rp)	Ln Total Assets
51	ROTI	4559573709411	29
52	BTEK	5306055112389	29
53	DLTA	1340842765000	28
54	KINO	3237595219274	29
55	TCID	2361807189430	28
56	DVLA	1640886147000	28
57	SKBM	1623027475045	28
58	ADES	840236000000	27
59	CEKA	1392636444501	28
60	WIIM	1225712093041	28
61	LMPI	834548374286	27
62	KICI	149420009884	26
63	MRAT	497354419089	27
64	ALTO	1109383971111	28
65	MBTO	780669761787	27
66	ASII	295646000000000	33
67	SMSM	2443341000000	29
68	IMAS	31440443615533	31
69	AUTO	14762309000000	30
70	KBLI	2591277623748	29
71	BATA	855691231000	27
72	MYTX	3458737000000	29
73	NIPS	1897962447000	28
74	STAR	614705038056	27
75	KBLM	1235198847468	28
76	TRIS	544968319987	27

No	Code	Total Assets (Rp)	Ln Total Assets
77	RICY	1374444788282	28
78	BIMA	89327328853	25
79	HDTX	4035086385000	29

